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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/661,433

09/12/2003

Gregory S. Meyer

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12/01/2005

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EXAMINER

PRASAD, CHANDRIKA

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

113

<b>Office Action Summary</b>	<b>Application No.</b> 10/661,433	<b>Applicant(s)</b> MEYER ET AL.	
	<b>Examiner</b> Chandrika Prasad	<b>Art Unit</b> 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 11, 27, 34 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-26, 28-33 and 35-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/12/03</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Invention I in the reply filed on 10/01/05 is acknowledged. The traversal is on the ground(s) that innovative features recited in claim 1 are identical to those in Claim 39. This is not found persuasive because the circuit board assembly of invention I can be used in devices other than a computing device or vice versa.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant's election without traverse of Embodiment 3: Figures 4-9 and claims 1-10, 12-26, 28-33 and 35-38, in the reply filed on 10/01/05 is acknowledged.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second shorter extent must be shown or the feature(s) canceled from the claims 1-10, 12-26 and 28-33. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

Art Unit: 2839

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Specification***

5. The following is a quotation of an appropriate paragraph of 37 CFR 1.75:

(d) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a)).

Specification is objected under 37 C.F.R. 1.75(d) because a second shorter extent has not been described in the specification.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-10, 12-26 and 28-33 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2839

The independent claims 1 and 19 recite " a second shorter extent" which is not clear because a first shorter extent has not been defined.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2, 4-7, 13-15, 19-20, 22-26, 33 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Dehaine et al. (5901039).

Dehaine (Figures 1-3) shows a circuit board assembly comprising an electronic component (processor) 13 having a circuit board (not shown), a first circuit board 11, a first connector portion 16, a second connector portion 14, a first alignment member 23, a second alignment member 18 to interact with the first alignment member such that the second alignment member extends relative to the second connector portion by a first extent (referring to the top of the second alignment member 18) prior to engagement of the first and second connector portions and the second alignment member extends relative to the second connector portion by a second extent (again referring to the top of the second alignment member 18) upon engagement of the first and second connector portions wherein the second extent is shorter than the first extent. The first alignment member has a detent and the second alignment member has a detent engaging structure. The second alignment member is movably supported between a first and second positions and is resiliently biased in the first position. The first connector portion

Art Unit: 2839

has a bore to movably receive the second alignment member. A structure (heat sink assembly) is coupled to the first connector portion has a bore with a spring to bias the second alignment member. Dehaine further shows a third and fourth alignment members similar to the first and second ones.

10. Claims 35-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis (4842543).

Davis (Figures 1-6) shows a circuit board assembly comprising an electronic component (processor unit) , a first circuit board 14, a first connector portion 10, a second connector portion 12, and means for aligning the two connectors which do not extend through the circuit board. The first connector has a plurality of pins and the second has a plurality of sockets.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dehaine et al. (5901039).

Dehaine shows all the features of these claims except a tapered guide surface on the detent. Such a feature is common knowledge and widely used in the art of connectors. Dehaine shows such a feature on the detent engaging structure. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to

Art Unit: 2839

provide the tapered guide surface on the detent instead of the detent-engaging structure since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

13. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dehaine et al. (5901039).

Dehaine shows all the features of these claims except the electronic component coupled to the second alignment member. Dehaine shows the first alignment member coupled to the component. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to provide such a feature since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

14. Claims 10, 12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dehaine et al. (5901039) in view of Davis (4842543).

Dehaine shows all the features of these claims except the first alignment member having a structure with a bore to receive the second alignment member wherein the bore does not extent into the circuit board and the first connector portion having pins and the second connector portion having sockets. Davis shows these features. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to provide these features as an alternate because both serve the same purpose.

15. Claims 16-18 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dehaine et al. (5901039).

Art Unit: 2839

Dehaine shows all the features of these claims except fifth, sixth, seventh and eighth alignment members similar to the first and second ones. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to provide a plurality of such alignment members because this would require a mere duplication of essential parts, which involve only routine skill in the art. *St. Regis Co. vs. Bemis co.*, 193 USPQ 8.

***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Sathe et al.* (5754400), *Wang* (5919063), *Umezawa* (6023413) and *Hunt, III et al.* (4761144).

***Contact Information***

17. Any correspondence to this action may be mailed to:

**Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad whose telephone number is (571) 272-2099. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached at (571) 272-2800 ext 39. The fax number is (703) 872-9306.



Chandrika Prasad  
Primary examiner  
November 25, 2005